

Remarks

The sequence listing enclosed herewith includes SEQ ID NOS:1-5. The sequence listing submitted herewith is identical to the sequence listing filed January 11, 1999, which was identical to the originally filed sequence listing except that in the originally filed sequence listing there were only SEQ ID NOS:1-4, and SEQ ID NO:4 showed both the nucleotide sequence and the protein sequence it encoded. In the present sequence listing, SEQ ID NO:4 is the nucleotide sequence of originally filed SEQ ID NO:4 and SEQ ID NO:5 is the protein sequence of originally filed SEQ ID NO:4. Accordingly, this amended sequence listing introduces no new matter.

Telephonic Conference

Applicant thanks the Examiner for the courtesy of a telephonic conference with the Applicant's attorney on August 15, 2005, during which actions to place the application in condition for allowance were discussed.

Objections to the Specification

The specification was objected to because the amendment filed March 7, 2005, in particular the sequence listing, allegedly introduced new matter. The applicant disagrees that the sequence listing introduced new matter. But to facilitate prosecution, applicant herein has replaced the sequence listing with the originally filed sequence listing, except that the originally filed SEQ ID NO:4 included both a nucleotide and protein sequence, and those are separated in the present sequence listing, so SEQ ID NO:4 is the originally filed nucleotide sequence and SEQ ID NO:5 is the originally filed protein sequence.

The paragraph beginning at page 14, line 10 of the specification is amended herein to make it identical to the originally filed paragraph to match the present sequence listing.

The paragraph beginning at page 2, line 6 of the specification is amended herein to make it identical to the originally filed paragraph except for the reference to SEQ ID NO:5, made necessary by splitting the originally filed SEQ ID NO:4 containing a nucleotide and a protein sequence into the present SEQ ID NO:4 (nucleotide sequence) and SEQ ID NO:5 (protein sequence).

Accordingly, the present amendments to the sequence listing and specification introduce no new matter and are believed to obviate the objection to the specification.

The Rejections of the Claims under 35 U.S.C. § 112

Claims 3, 5, 11, and 13 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection as it may apply to the amended claims is respectfully traversed.

This rejection was based on the assertion that the claims recited amino acid and nucleotide sequences that were not supported by the originally filed specification. The amendments to the claims and the sequence listing obviate this rejection. The claims recite only sequences that were disclosed in the originally filed sequence listing.

Claims 3, 5, and 11 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This rejection is respectfully traversed.

The Examiner argued that the word “about” rendered the claims indefinite because it is allegedly unclear whether the claimed polypeptide consists only of amino acid residues 25-250 of full length human erythropoietin receptor or about 30-249, etc. Applicant respectfully disagrees and notes that the Examiner suggested use of the word “about” in the claims in a telephonic conference with the applicant’s attorney on November 24, 2004. Nonetheless, to facilitate prosecution, the word “about” has been deleted from the claims. It is believed that this obviates the basis for this rejection.

Claim 3 (and claim 11 depending from claim 3) has been amended to recite “An isolated polypeptide consisting essentially of about amino acid 25 to about amino acid 250 of a full length human erythropoietin receptor protein (SEQ ID NO:5)” The phrase “consisting essentially of” has well-established use in patent claims. The transition “consisting essentially of” renders a claim open for the inclusion of only unspecified ingredients that do not “materially affect the basic and novel characteristics of the claimed composition.”¹ Claim 3 recites those material and novel characteristics of

¹ *Dow Chem. Co. v. American Cyanamid Co.*, 615 F. Supp 471,484, 229 U.S.P.Q. 171, 180 (E.D. La. 1985), *aff’d* 816 F.2d 617, 2 U.S.P.Q.2d 1350 (Fed. Cir. 1987); *Atlas Powder Co. v. E.I. DuPont de Nemours & Co.*, 750 F.2d 1569, 1574, 224 U.S.P.Q. 409,

the polypeptide that unspecified additional components may not alter – having a specific affinity for human erythropoietin and having a molecular weight of 29 kDa. Thus, it is respectfully submitted that the metes and bounds of claim 3 and claims 5 and 11, which depend from claim 3, are definite under 35 U.S.C. § 112, second paragraph.

The phrase “consisting essentially of” is used because it is believed to provide a basis for stronger coverage under the claims of an isolated Epo binding protein consisting of amino acid residues 25-250 of the Winkelmann et al. Epo receptor protein sequence, which is the sequence the inventor actually used in her experiments described in the Examples. This fact is described in the enclosed Declaration under 37 C.F.R. § 1.132 by the applicant, Jong Y. Lee. Dr. Lee discloses that the inclusion of the Jones et al. protein sequence instead of the Winkelmann et al. sequence was an inadvertent mistake by her patent attorney on filing the application. She discloses that the Jones et al. sequence and the Winkelmann et al. sequence are nearly identical, differing at 4 amino acid residues. She discloses that she believes that a protein fragment consisting of residues 25 to 250 of either the Winkelmann et al. sequence or the Jones et al. sequence would function equally well as soluble Epo binding proteins as described in the present application.

In view of this declaration that (1) the two sequences are believed to be functionally identical, (2) the Winkelmann et al. sequence was the one actually used in creating and testing the invention, and (3) the replacement of the Winkelmann et al. sequence by the nearly identical Jones et al. sequence was an inadvertent error by her patent attorney, Dr. Lee deserves claims that will cover the isolated Epo binding protein that is based on the Winkelmann sequence. The use of the phrase “consisting essentially of” is intended to do that, since use of a soluble Epo binding protein having the Winkelmann et al. sequence instead of the Jones et al. sequence would not “materially affect the basic and novel characteristics of the claimed composition,” since Dr. Lee has stated in her Rule 132 declaration that the two protein sequences are functionally equivalent. The phrase “consisting essentially of” does not leave the claims indefinite, as it has a clear and well-established meaning in patent law, as discussed above.

411 (Fed. Cir. 1984); *PPG Indus. v. Guardian Indus. Corp.*, 156 F3d 1351, 1355, 48 U.S.P.Q.2d 1351, 1353-54 (Fed. Cir. 1998).

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (651-207-8270) to facilitate prosecution of this application.


Respectfully submitted,

JONG Y. LEE

By her Representatives,

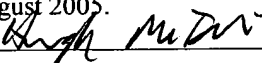
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United State Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 30 day of August 2005.


Hugh McTavish